Sentinel lymph node biopsy has been accepted as standard practice for the evaluation of the node negative axilla in breast cancer \(^1\), and several studies confirm the accuracy of sentinel lymph node biopsy using a dual tracer technique in the setting of prior surgical biopsy \(^2\,^3\). Superparamagnetic iron oxide - facilitated (Sienna+ \(^\circledast\), Endomagnetics, Cambridge UK) sentinel lymph node biopsy has recently emerged as a novel method of accurately locating the sentinel lymph node \(^4\). However, the accuracy of this method in the setting of surgical breast biopsy has not been examined.

Ten female patients with a mean age of 52 years (31 – 74 years) were evaluated. The majority presented with early stage invasive ductal carcinoma (n = 7). Mean time from surgical biopsy to sentinel node biopsy was 25 days (14 – 47 days), and five patients were found to be sentinel node positive. In all cases (10/10) the Sentimag probe demonstrated elevated readings in the sentinel node, which was concordant with the gold standard dual tracer technique.

In this series of patients, Sienna+ \(^\circledast\) demonstrated a high degree of concordance with the dual tracer technique. Future research will focus on determining concordance objectively by identification of iron pigment derived from Sienna+ \(^\circledast\) in the sinus macrophages of the sentinel lymph node.